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CLAIMS

Claims 23-34 (canceled)

35. (Canceled).

36. (Currently amended) ~~A method according to claim 35,~~ A method comprising:

monitoring an electrogram signal to find a trigger event in the electrogram signal, wherein said electrogram signal is obtained via at least a pair of subcutaneous electrodes spaced from a heart;

generating a trigger indicator signal upon finding the trigger event;

recording a plurality of sampled values of the electrogram signal in a memory structure; and

recording the trigger indicator signal in the memory structure contemporaneously with the recording of the sampled values of the electrogram signal.

wherein recording the trigger indicator signal in the memory structure comprises replacing one of the sampled values with the trigger indicator signal and wherein the trigger event comprises detection of out-of-range values of the electrogram signal.

37. (Currently amended) A method according to claim 36, wherein the trigger indicator signal is a first trigger indicator signal corresponding to a first trigger event, the method further comprising:

generating a second trigger indicator signal upon finding the second trigger event in the electrogram signal; and

recording the second trigger indicator signal in the memory structure contemporaneously with the recording of the sampled values of the electrogram signal.

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38. (Currently amended) A method according to claim 365, further comprising compressing the plurality of sampled values prior to recording the plurality of sampled values in the memory structure.
39. (Currently amended) A method according to claim 365, further comprising:
transmitting the recorded sampled values of the electrogram signal and the recorded trigger indicator signal to an external device;
parsing the trigger indicator signal from the recorded sampled values of the electrogram signal; and
generating a display as a function of the recorded sampled values.
40. (Previously presented) A method according to claim 39, wherein generating the display as a function of the recorded sampled values comprises displaying an electrogram waveform.
41. (Previously presented) A method according to claim 39, further comprising generating the display as a function of the trigger indicator signal.
42. (Previously presented) A method according to claim 41, wherein generating the display as a function of the trigger indicator signal comprises generating a display icon as a function of the trigger indicator signal.
43. (Previously presented) A method according to claim 41, further comprising:
monitoring the electrogram signal to find noise in the electrogram signal;
generating a noise indicator signal upon finding the noise, the noise indicator signal being a function of the noise found in the electrogram signal; and
recording the noise indicator signal in the memory structure contemporaneously with the recording of the sampled values of the electrogram signal,

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wherein recording the noise indicator signal in the memory structure comprises replacing another of the sampled values with the noise indicator signal.

44. (Previously presented) A method according to claim 43, further comprising:

transmitting the recorded noise indicator signal to an external device;
parsing said noise indicator signal from the recorded sampled values of the electrogram signal; and
generating a second display as a function of the recorded sampled values.

45. (Previously presented) A method according to claim 44, further comprising generating the display as a function of the noise indicator signal.

46. (Previously presented) A method according to claim 45, wherein generating the display as a function of the noise indicator signal comprises generating a display icon as a function of the noise indicator signal.

47. (Currently amended) A method according to claim 365, further comprising recording other sensor data in the memory structure.

48. (Currently amended) A method, ~~according to claim 47, comprising:~~
monitoring an electrogram signal to find a trigger event in the electrogram signal, wherein said electrogram signal is obtained via at least a pair of subcutaneous electrodes spaced from a heart;
generating a trigger indicator signal upon finding the trigger event;
recording a plurality of sampled values of the electrogram signal in a memory structure; and

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recording the trigger indicator signal in the memory structure contemporaneously with the recording of the sampled values of the electrogram signal,

wherein recording the trigger indicator signal in the memory structure comprises replacing one of the sampled values with the trigger indicator signal, and further comprising recording other sensor data in the memory structure, wherein the other sensor data comprises a plurality of samples of other sensor data, the method further comprising recording one sample of other sensor data per thirty sampled values of the electrogram signal.

49. (Currently amended) A method according to claim 365, wherein the trigger event comprises an arrhythmia.

50. (Currently amended) A method according to claim 365, wherein monitoring the electrogram signal to find a trigger event in the electrogram signal comprises monitoring the electrogram signal to find a predetermined pattern in the electrogram signal.

51. (canceled).

52. (Currently amended) A medium containing stored executable instructions for performing a method, comprising:

instructions for monitoring an electrogram signal to find a trigger event in the electrogram signal, wherein said electrogram signal is obtained via at least a pair of subcutaneous electrodes spaced from a heart;

instructions for generating a trigger indicator signal upon finding the trigger event;

Instructions for recording a plurality of sampled values of the electrogram signal in a memory structure; and

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instructions for recording the trigger indicator signal in the memory structure contemporaneously with the recording of the sampled values of the electrogram signal.

wherein the recording the trigger indicator signal in the memory structure further comprises instructions for replacing one of the sampled values with the trigger indicator signal and according to claim 54, wherein the trigger event comprises detection of out-of-range values of the electrogram signal.

53. (Currently amended) A medium according to claim 524, wherein the trigger indicator signal comprises a first trigger indicator signal corresponding to a first trigger event, and further comprising:

instructions for generating a second trigger indicator signal upon finding the second trigger event in the electrogram signal; and

instructions for recording the second trigger indicator signal in the memory structure contemporaneously with the recording of the sampled values of the electrogram signal.

54. (Currently amended) A medium according to claim 524, further comprising instructions for compressing the plurality of sampled values prior to recording the plurality of sampled values in the memory structure.

55. (Currently amended) A medium according to claim 524, further comprising:

instructions for transmitting the recorded sampled values of the electrogram signal and the recorded trigger indicator signal to an external device;

instructions for parsing the trigger indicator signal from the recorded sampled values of the electrogram signal; and

instructions for generating a display as a function of the recorded sampled values.

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56. (Previously presented) A medium according to claim 55, wherein the instructions for generating the display as a function of the recorded sampled values comprises instructions for displaying an electrogram waveform.

57. (Previously presented) A medium according to claim 55, further comprising instructions for generating the display as a function of the trigger indicator signal.

58. (Previously presented) A medium according to claim 57, wherein the instructions for generating the display as a function of the trigger indicator signal further comprises instructions for generating a display icon as a function of the trigger indicator signal.

59. (Previously presented) A medium according to claim 57, further comprising:

- instructions for monitoring the electrogram signal to find noise in the electrogram signal;

- instructions for generating a noise indicator signal upon finding the noise, the noise indicator signal being a function of the noise found in the electrogram signal; and

- instructions for recording the noise indicator signal in the memory structure contemporaneously with the recording of the sampled values of the electrogram signal,

- wherein recording the noise indicator signal in the memory structure comprises replacing another of the sampled values with the noise indicator signal.

60. (Previously presented) A medium according to claim 59, further comprising:

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instructions for transmitting the recorded noise indicator signal to an external device;

instructions for parsing said noise indicator signal from the recorded sampled values of the electrogram signal; and

instructions for generating a display as a function of the recorded sampled values.

61. (Previously presented) A medium according to claim 60, further comprising instructions for generating the display as a function of the noise Indicator signal.

62. (Previously presented) A medium according to claim 61, wherein the instructions for generating the display as a function of the noise indicator signal further comprises instructions for generating a display icon as a function of the noise indicator signal.

63. (Currently amended) A medium according to claim 524, further comprising instructions for recording other sensor data in the memory structure.

64. (Previously presented) A medium containing stored executable instructions for performing a method, comprising:

instructions for monitoring an electrogram signal to find a trigger event in the electrogram signal, wherein said electrogram signal is obtained via at least a pair of subcutaneous electrodes spaced from a heart;

instructions for generating a trigger indicator signal upon finding the trigger event;

instructions for recording a plurality of sampled values of the electrogram signal in a memory structure; and

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instructions for recording the trigger indicator signal in the memory structure contemporaneously with the recording of the sampled values of the electrogram signal.

wherein the recording the trigger indicator signal in the memory structure further comprises instructions for replacing one of the sampled values with the trigger indicator signal and further comprising instructions for recording other sensor data in the memory structure and according to claim 63, wherein the other sensor data comprises a plurality of samples of other sensor data, the medium further comprising instructions for recording one sample of other sensor data per thirty sampled values of the electrogram signal.

65. (Currently amended) A medium according to claim 52~~1~~, wherein the trigger event comprises an arrhythmia.

66. (Currently amended) A medium according to claim 52~~1~~, wherein the instructions for monitoring the electrogram signal to find a trigger event in the electrogram signal further comprises instructions for monitoring the electrogram signal to find a predetermined pattern in the electrogram signal.

67. (canceled)

68. (Currently amended) ~~An apparatus according to claim 67,~~ An apparatus for performing a method, comprising:

means for monitoring an electrogram signal to find a trigger event in the electrogram signal, wherein said electrogram signal is obtained via at least a pair of subcutaneous electrodes spaced from a heart;

means for generating a trigger indicator signal upon finding the trigger event;

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means for recording a plurality of sampled values of the electrogram signal in a memory structure; and

means for recording the trigger indicator signal in the memory structure contemporaneously with the recording of the sampled values of the electrogram signal.

wherein the recording the trigger indicator signal in the memory structure further comprises means for replacing one of the sampled values with the trigger indicator signal and wherein the trigger event comprises detection of out-of-range values of the electrogram signal.

69. (Currently amended) An apparatus according to claim 687, wherein the trigger indicator signal comprises a first trigger indicator signal corresponding to a first trigger event, and further comprising:

means for generating a second trigger indicator signal upon finding the second trigger event in the electrogram signal; and

means for recording the second trigger indicator signal in the memory structure contemporaneously with the recording of the sampled values of the electrogram signal.

70. (Currently amended) An apparatus according to claim 687, further comprising means for compressing the plurality of sampled values prior to recording the plurality of sampled values in the memory structure.

71. (Currently amended) An apparatus according to claim 687, further comprising:

means for transmitting the recorded sampled values of the electrogram signal and the recorded trigger indicator signal to an external device;

means for parsing the trigger indicator signal from the recorded sampled values of the electrogram signal; and

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means for generating a display as a function of the recorded sampled values.

72. (Previously presented) An apparatus according to claim 71, wherein the means for generating the display as a function of the recorded sampled values comprises means for displaying an electrogram waveform.

73. (Previously presented) An apparatus according to claim 71, further comprising means for generating the display as a function of the trigger indicator signal.

74. (Previously presented) An apparatus according to claim 73, wherein the means for generating the display as a function of the trigger indicator signal further comprises means for generating a display icon as a function of the trigger indicator signal.

75. (Previously presented) An apparatus according to claim 73, further comprising:

means for monitoring the electrogram signal to find noise in the electrogram signal;

means for generating a noise indicator signal upon finding the noise, the noise indicator signal being a function of the noise found in the electrogram signal; and

means for recording the noise indicator signal in the memory structure contemporaneously with the recording of the sampled values of the electrogram signal,

wherein recording the noise indicator signal in the memory structure comprises replacing another of the sampled values with the noise indicator signal.

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76. (Previously presented) An apparatus according to claim 75, further comprising:

means for transmitting the recorded noise indicator signal to an external device;

means for parsing said noise indicator signal from the recorded sampled values of the electrogram signal; and

means for generating a display as a function of the recorded sampled values.

77. (Previously presented) An apparatus according to claim 76, further comprising means for generating the display as a function of the noise indicator signal.

78. (Previously presented) An apparatus according to claim 77, wherein the means for generating the display as a function of the noise indicator signal further comprises means for generating a display icon as a function of the noise indicator signal.

79. (Currently amended) An apparatus according to claim ~~687~~, further comprising means for recording other sensor data in the memory structure.

80. (Currently amended) An apparatus according to claim ~~687~~, wherein the means for monitoring the electrogram signal to find a trigger event in the electrogram signal further comprises means for monitoring the electrogram signal to find a predetermined pattern in the electrogram signal.

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